CLAIMS

1. A method of coupling together first and second waveguide connectors, the method including the steps of a) moving the connectors together to a first axial position in which part of the first connector engages a first axial stop on the second connector; b) causing relative movement between the first connector and the first axial stop; and c) moving the interface assemblies together axially after step b) to a second axial position in which part of the first connector engages a second axial stop on the second connector.

2. A method according to claim 1 wherein the relative movement between the first connector and the first axial stop in step b) causes the first and second waveguide connectors to become captive.

3. A method according to claim 1 wherein the movement in step b) is a rotary movement.

4. A method according to claim 1 wherein the first connector is moved in step b).

5. A method according to claim 1 wherein part of the first connector engages a transverse stop on the second connector at the end of step b) and before step c)

6. A method according to claim 1 including the step of aligning male and female parts of the first and second connectors before step a), and mating the male and female parts together during step a).

7. A method according to claim 1 including the step of aligning male and female parts of the first and second connectors before step c), and mating the male and female parts together during step c).

8. A method according to claim 1 including the steps of aligning first male and female parts of the first and second connectors before step a), mating the first male and female parts together during step a); aligning second male and female parts of the first and second connectors before step c), and mating the second male and female parts together during step c).

9. A waveguide connector for connection with a second waveguide connector to form an axially extending waveguide joint, the connector including a first axial stop at a first axial position; and a second axial stop at a second axial position.

10. A waveguide connector according to claim 9 including a female part for receiving a mating male part of the second waveguide connector.

11. A waveguide connector according to claim 10 wherein the female part is an elongate slot.

12. A waveguide connector according to claim 11 wherein the elongate slot has a relatively wide portion and a relatively narrow portion.

13. A waveguide connector according to claim 12 wherein the slot has a counterbore formed around the relatively narrow portion of the slot.

14. A waveguide connector according to claim 12 wherein the relatively wide portion of the slot is substantially circular.

15. A waveguide connector according to claim 12 wherein the relatively narrow portion of the slot is elongate.

16. A waveguide connector according to claim 12 wherein the relatively narrow portion of the slot is curved.

17. A waveguide connector according to claim 11 wherein the slot is a closed slot.

18. A waveguide connector according to claim 11 including two or more elongate slots.

19. A waveguide connector according to claim 9 including a waveguide aperture.

20. A waveguide connector including a waveguide aperture; and one or more screw assemblies, each screw assembly including:
    a. a screw with a head and a threaded shaft screwed into a threaded bore in the waveguide connector; and
    b. a captive nut threaded onto the shaft and positioned between the head of the screw and the waveguide connector.

21. A waveguide connector according to claim 20 wherein the shaft has a threaded distal portion and an unthreaded proximal portion.

22. A waveguide connector according to claim 21 wherein the unthreaded proximal portion is adjacent to the head of the screw.

23. A waveguide connector according to claim 20, mounted in use at an elevated location on a mast.

24. A waveguide assembly including a waveguide connector according to claim 20, and a mounting member for mounting the waveguide assembly in use on a mast.

25. A waveguide connector kit including a plug having a distal end with a waveguide aperture formed therein, the plug having a side wall with a non-circular profile; and a socket for receiving the plug, the socket having a base with a waveguide aperture formed therein, and a side wall having a non-circular profile which mates with the non-circular profile of the plug when the plug and socket are brought together in correct alignment.

26. A connector for use in an assembly according to claim 25, including a plug having a distal end with a waveguide aperture formed therein, the plug having a side wall with a non-circular profile.

27. A connector according to claim 26 wherein the profile is continuously curved.

28. A connector according to claim 26 wherein the side wall has a groove formed therein for receiving an O-ring.

29. A connector according to claim 26 further including a chamfered edge between the distal end of the plug and the side wall.

30. A waveguide connector for use in an assembly according to claim 25, including a socket having a base with a waveguide aperture formed therein, and a side wall having a non-circular profile.

31. A connector according to claim 30 wherein the profile is continuously curved.

32. A connector according to claim 30 further including a chamfered edge between the base of the socket and the side wall.

33. A waveguide interface having a waveguide aperture; one or more curved slots; and two or more counterbores formed around the slot.

34. A waveguide interface according to claim 33 wherein each counterbore is substantially flat bottomed.

35. A waveguide interface according to claim 33 wherein each counterbore is substantially circular.

36. A waveguide interface according to claim 33 wherein the or each slot has a first end and a second end; a first counterbore formed around the first end of the slot; and a second counterbore formed around the second end of the slot.

37. A waveguide interface according to claim 33 having two or more slots, each slot having two or more counterbores formed around the slot.

38. A waveguide interface according to claim 33 including a flange surrounding the waveguide aperture, wherein the slots are formed in the flange.

39. A method of adjusting the orientation of a waveguide interface, the waveguide interface including a waveguide aperture, a curved slot with two or more counterbores formed around the slot, and a securing member received in a first one of the counterbores, the method including the steps of a) removing the securing member from the first one of the counterbores; b) rotating the waveguide interface until the securing member is aligned with a second end one of the counterbores; and c) inserting the securing member into the second one of the counterbores.

40. A method according to claim 39 wherein step b) includes rotating the waveguide interface until the securing member engages an end of the slot.

41. A method according to claim 39 wherein the waveguide interface is coupled to an antenna whereby the antenna rotates with the waveguide interface during step b).